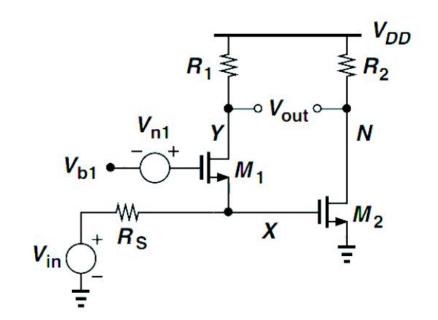
Automating RF Circuit Synthesis

Noise Cancelling LNA

Specifications: (at 1 GHz)

- 1. Gain > 15 dB
- 2. Noise Figure $\leq 5 \text{ dB}$
- 3. $S11 \le -10 \text{ dB}$
- 4. IIP3 > -10 dBm
- 5. Power Dissipation Minimized



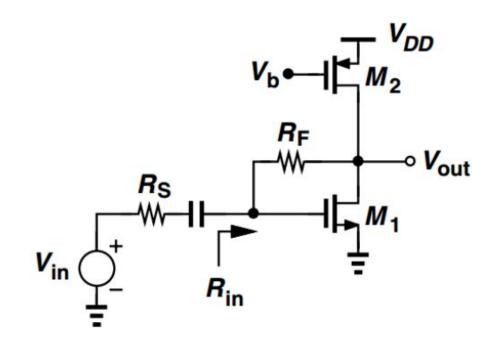
Ref: RF Microelectronics, Razavi

Automating RF Circuit Synthesis

Resistive Feedback LNA

Specifications: (at 1.58 GHz)

- 1. $Gain \ge 10 dB$
- 2. Noise Figure $\leq 4 \text{ dB}$
- 3. $S11 \le -10 \text{ dB}$
- 4. IIP3 > -15 dBm
- 5. Power Dissipation Minimized



Ref: RF Microelectronics, Razavi